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CHARLES SPRAGUE SARGENT

ALFRED REHDER

With Portrait

ON March twenty-second, Charles Sprague Sargent, for fifty-four years director of the Arnold Arboretum, died at his home "Holm Lea," Brookline, Mass., after a short illness in the eighty-sixth year of his age.

Charles Sprague Sargent was born in Boston on April 24th, 1841, the third child of Ignatius and Henrietta (Gray) Sargent. His father was a well-known merchant in the East India trade and a direct descendant in the fourth generation of William Sargent who probably came from England before 1678 and died in Gloucester, Massachusetts, in 1725. Charles prepared for College chiefly at E. S. Dixwell's School and graduated from Harvard in the class of 1862. In the following year, the civil war having started in 1861, he entered the military service of his country; he became First Lieutenant in the Second Louisiana Infantry and subsequently Aide-de-camp at the headquarters of the Department of the Gulf at New Orleans. On March 26th he was breveted Major of volunteers for "faithful and meritorios service "during the campaign against Mobile and on August 26th, 1865 he was honorably mustered out. After leaving military service he spent three years traveling in Europe and returned in the autumn of 1868 to take up the practice of horticulture and study of botany. In 1872 he became director of the Harvard Botanic Garden and was professor of horticulture during 1872 and 1873. On November 24, 1873 he was appointed director of the recently created Arnold Arboretum and served in both capacities until 1879, when he gave up the directorship of the Botanic Gardens to devote his entire time to the development of the Arnold Arboretum.

On November 26, 1873, he married Mary Allen Robeson, daughter of Andrew Robeson of Boston. She was an ideal companion and shared his tastes, his love of trees and of nature; she accompanied him in 1886 and 1887 on his cruises along the Florida coast for the exploration of the Florida Keys and went with him to Mexico. Being a skilful artist she painted the drawings illustrating the flowers and fruits of the trees represented in the collection of American woods prepared by Professor Sargent for the American Museum of Natural History in New York.

Almost all their married life was spent at their beautiful estate, Holm Lea, in Brookline where she presided as a charming hostess over a hospitable home. Her personality was pictured by Bishop Lawrence of Massachusetts at the time of her death which occurred on August 15, 1919, in these words: "Whenever she entered a room, be it drawing room filled with guests, a bedroom with a solitary invalid, or an institution filled with forlorn and wayward girls, the atmosphere was immediately charged with vitality, sympathy and cheer. She did not have to do or even say any-

thing in order to be felt, her presence was enough; and her voice and aeeds were the unconscious expression of a very warm heart and a very friendly spirit."

When in 1873 Sargent accepted the directorship of the new Arboretum, he found himself, as he stated later, "With a wornout farm, partly covered with natural plantations of native trees nearly ruined by excessive pasturage, to be developed into a scientific garden with less than \$3000 available for that purpose, without equipment or the support and encouragement of the general public which then knew nothing about an arboretum or what it is expected to accomplish." On the other hand, there were assets such as groves of old trees which covered part of the land and particularly a rocky hill with steep cliffs and covered with a fine growth of old Hemlocks at the foot of which flowed a picturesque brook. These handicaps, however, did not discourage Sargent. As the income was entirely inadequate for the development of such a large area as a botanic garden, Sargent and Frederick Law Olmsted, who at that time was engaged in planning and constructing a park system for the city of Boston, conceived the plan of having the Arboretum used with certain restrictions as a part of the Boston park system. This plan met with little favor and was opposed by the governing Board of the College and the Park Commissioners of Boston, but finally the two men succeeded in convincing both parties of the advantage of such an arrangement and in 1882 an agreement was signed whereby the City of Boston took the land and leased it back to the College for one thousand years with the option of renewing the lease after the expiration of that term. By this agreement the City was to undertake the construction and maintenance of roads and paths, the protection and policing the grounds, while at the same time the property was relieved of the danger of taxation; the grounds themselves were given over to the College for the planting of a collection of trees and shrubs. In the meantime plants for the collection had been raised and propagated in the greenhouses of the adjoining Bussey Institution available for this purpose, but it was not possible to begin planting on a large scale until 1886, as the City was slow in building the roads and the gravel paths. The area which in 1882 was less than 150 acres was soon found to be too small for an arboretum on a large scale and additions were made several times until the Arboretum now covers 250 acres.

During 1879 and 1882 Sargent had, as an agent of the Tenth Census,

charge of the investigation of the forests and forest resources of the United States. The results of these investigations are incorporated in a volume published as a part of the Tenth Census. This was the first important effort to bring together the facts in regard to American forests and furnished for many years the chief data on our forest resources. During his travels in connection with this work he visited all the important forested regions and made a large collection of specimens which formed the first important contribution to the herbarium he had started in 1878. He also brought together a remarkable collection of wood specimens of the American trees. This collection named the Jesup collection for Mr. Morris K. Jesup who provided the funds for it, is now in the Natural History Museum of New York and a duplicate set at the Arnold Arboretum. In 1882 he was approached by Professor Spencer F. Baird to undertake the preparation of a Silva of North America to be published by the Smithsonian Institution, but when the work was started it became apparent that, the way the payments by the Smithsonian Institution were arranged, it would take at least seventy-five years to finish the work. Therefore, Sargent made another arrangement and engaged Charles E. Faxon, who had already shown great ability as a botanical artist, to prepare the plates; at the same time Faxon took charge of the herbarium and the library of the Arboretum. The first volume of this monumental work of fourteen folio volumes was ready in 1891 and the last of the 740 plates appeared just twenty-one years after Faxon had made the first drawing. The copper plates were engraved under the direction of the French artists Riocreux and Picart famous for their excellent plant portraits. The text shows the thoroughness and painstaking care characteristic of Sargent's work; of each species complete references to literature and synonyms and a detailed botanical description are given, followed by copious notes of general, economic and horticultural interest. In 1882 and 1883 he was a member of the Northern Pacific Transcontinental Survey; during this survey the magnificent and extensive glaciers in northern Montana were discovered and Sargent advocated having this region declared a national park on account of its scenic grandeur, but nearly thirty years elapsed before it was set aside as Glacier Park by act of Congress.

In 1884 Sargent acted as chairman of the commission to investigate for the State of New York the Adirondack forests and to establish a conservation policy. In the winter and spring of 1885 with C. E. Faxon he visited some of the West Indian Islands to study the tropical and subtropical trees identical with those of southern Florida. In 1886 and 1887 he undertook several cruises along the Florida coast on the United States lighthouse tender Laurel placed at his disposal by the government for the purpose of studying the arboreal vegetation of the Florida Keys; he was accompanied by Mrs. Sargent and Messrs. J. M. Codman and C. E. Faxon. During one of these cruises in the spring of 1886 he discovered a new genus of Palm,

Pseudophoenix Sargentii, later found to be identical with a species growing on the Bahamas, though not before recognized as a new genus. In 1887 he traveled in Mexico and collected chiefly near Saltillo and Monterey.

In 1888 he started Garden and Forest, a magazine chiefly devoted to forestry, horticulture and botany, which he conducted for ten years until it was discontinued in 1897. Through this magazine he endeavored to rouse public interest in the preservation of the forests and in the inauguration of a definite forest policy, he advocated the creation of national parks and tried to awaken a deeper interest in horticulture and landscape gardening and in plants in their different aspects. In 1892 he had the satisfaction of moving the library, the herbarium, and the offices of the Arboretum which had been kept up to that time in a private house in Brookline into a brick building erected for this purpose in the Arboretum grounds and for which Mr. H. H. Hunnewell, a devoted friend of the Arboretum, had furnished the money; later a new wing was added to provide room for the rapidly increasing herbarium. In the same year Sargent visited Japan to study the forest flora of that country, bringing back a large number of specimens and many seeds of trees and shrubs new to American gardens. His observations he recorded in his "Forest Flora of Japan" first published in Garden and Forest in 1893 and later issued separately. There for the first time a comprehensive account of the trees and shrubs of Japan could be found with excellent

illustrations of many of the more important species.

About 1900 Sargent began the study of the genus Crataegus as represented in America to which he devoted much of his time during the following twenty years; he described about 730 new species and introduced the larger part of them into cultivation. The Hawthorn plantation now forms a prominent feature of the Arboretum.

In 1902 he started a new publication under the title "Trees and Shrubs" in which new and noteworthy species were figured and described. Two volumes containing 200 plates were published, the last part appearing in 1913.

In 1903 Sargent undertook a tour around the world accompanied by his son Robeson Sargent and, during the first part of his journey, by John Muir, the well known Californian naturalist and author. He went first to Europe and visited London, Paris, Holland, Berlin and Leningrad; from Leningrad he made a short journey into Finland and then to the Crimea and Transcaucasia. Crossing the range of the Caucasus he reached Moscow and from there he traveled on the Trans-Siberian Railway to Manchuria and then to Peking where he was able to visit the Forbidden City. From China he went to Singapore and Java where he visited the famous botanical garden at Buitenzorg. He returned by the way of Japan and San Francisco bringing with him large botanical collections for the Arboretum including many seeds of trees and shrubs new to American gardens. In 1905 he published his "Manual of the Trees of North America"

which might be characterized as an edition of his "Silva" condensed into one volume, with figures of all the North American trees known up to that time; a second edition came out in 1922 and a second reprint with corrections in 1926.

During the winter of 1905 to 1906 he traveled with his son Robeson in South America and collected chiefly in Peru and Chile. He went through the Straits of Magellan where he was delayed several weeks in the most southern town of the world. On account of this delay he had to give up his intended visit to the Argentine and returned home by way of the Falkland Islands, Rio, Cape Verde Islands and Lisbon. From 1911 to 1917 he edited Plantae Wilsonianae in three volumes in which the extensive collection made by E. H. Wilson in China for the Arboretum was recorded and many new species described. In 1911 he also started to publish the Arnold Arboretum bulletin of popular information which was issued during spring and autumn and intended to give to the public general information on the more important and noteworthy trees and shrubs growing in the Arboretum. In 1919 the quarterly Journal of the Arnold Arboretum was started, intended chiefly for the more technically botanical papers prepared at the Arboretum.

About the middle of January 1924 Sargent was stricken by a severe attack of herpes, followed by intestinal grippe, which held him confined to the house for more than three months. After this he never regained his former strength, though he was able to attend to his duties and to come to the Arboretum regularly almost every day up to March 5th of this year. Feeling ill on that day he had to leave his office earlier than usual never to return. After an illness of seventeen days he passed away at six o'clock in the evening of March twenty-second. He is survived by four children: Mrs. Guy Lowell (Henrietta Sargent), Mrs. Nathaniel Bowditch Potter (Mary Sargent), Mr. Charles S. Sargent, who is in the banking business in New York, and Miss Alice Sargent, who lived with her father. Another son, Andrew Robeson Sargent, died in 1918; he was a successful landscape gardener, associated with his brother-in-law Guy Lowell, the architect. Mrs. Sargent died in 1919. Sargent was a man of strong personality; he was tall, of athletic build and like his father and great-grandfather of shy, retiring disposition, a man of few words, averse to public speaking and, though professor of arboriculture, he never lectured. He was an indefatigable worker, set in his purpose and slow to change his opinion. To those who knew him little his manner might have appeared abrupt or often aloof, but those who knew him better were aware that he had a warm heart. It was not easy to win his confidence, but those whom he trusted could trust in him. At home, in congenial company and among his friends he would unbend and though rarely taking a leading part would enter into the spirit of the company. Toward ladies he had a charming deferential manner which won him many friends. He always enjoyed, up to his illness three years ago, perfect health and lightly carried occasional hardships during his travels.

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Sargent's one outstanding achievement was the creation and upbuilding of the Arnold Arboretum. Little did the men who placed on his hands an old wornout farm and an income of a few thousand dollars think that he would succeed in building up an institution which now ranks among the foremost botanic gardens and is the only large institution in the world devoted entirely to the study of trees and shrubs, with one of the richest botanical libraries and with a large herbarium more complete and richer than others in the representation of the ligneous flora of this country and of eastern Asia, so that for many years it has attracted besides others, Chinese and Japanese students who can study here the native flora of their countries to better advantage than in their own country. In the living collection Sargent always took the greatest interest and he himself gathered many seeds during his travels in this country and abroad by which he enriched it with new and rare trees and shrubs. He kept up connections with all important botanic gardens and nurseries in this country and in Europe and sent collectors to regions where plants grew that could be expected to thrive in the climate of Massachusetts. A catalogue of the trees and shrubs growing in the Arboretum was a work he undertook only a short time before his death, and in which he showed much interest until the very last, but fate did not allow him to finish this task.

The library was perhaps that department of the Arnold Arboretum with which he had the closest personal connection. It was begun as his own private botanical library in 1873 and had grown to 6000 volumes when it. was transferred in 1892 to the new administration building and presented to the University. But with this presentation his care for it did not cease and he continued to increase it at his own expense, so that the library as it stands now containing more than 37000 volumes and 8400 pamphlets is almost entirely his gift to the Arboretum. In the herbarium which served as a base for his monumental work the "Silva of North America" he was always much interested and during the last years even more so than before. He had made plans to carry out his idea of making the herbarium the representative herbarium of the ligneous flora of the world and there were already last year several collectors in the field for the Arboretum collecting in remote quarters of the world. He himself had collected extensively in this country and on his various journeys abroad. Collectors for the Arboretum were sent out and large collections bought or acquired by exchange, so that the building erected for it in 1909 is already inadequate, for an herbarium of woody plants including the numerous, often bulky fruit specimens and samples of wood requires much more space than an ordinary herbarium.

In the development of a definite forest policy for the United States Sargent played an important and leading part. When it was realized in the early seventies that the timber supply of the country, long considered inexhaustible, showed signs of depletion, an agitation set in for the planting of trees particularly on the prairies and Sargent reported in 1875 and

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1878 to the Massachusetts State Board of Agriculture on the planting of trees. This agitation caused the government of the United States to authorize a special study of the forests of the country in connection with the Tenth Census of 1880. Sargent was made chairman of a commission appointed for this purpose. He with other members of the commission visited and studied the most important forest areas of the country and published the results of this study in a comprehensive report published as a separate volume of the Tenth Census. This report contains a description of the forests of the country, a survey of the existing supply of standing timber, facts regarding the forest industries, a statement concerning the destruction of forests by fire and a summary of the existing information on the character and the quality of the different commercial woods. This report has remained for many years the chief source of information regarding the forests of the country. In 1884 he was appointed by the State of New York chairman of a commission to study the Adirondack forests which were in danger of ruthless exploitation. This report in which he outlined a definite forest policy for the State served as a basis for the establishment of a State Forest preserve and thus saved the Adirondack and Catskill forests for the people of New York. In Garden and Forest, a magazine he published from 1888 to 1897 he published numerous editorials and articles discussing forestry problems in order to educate the public, awaken its interest and arouse it to action on public questions relating to forestry. Among the more important discussions may be mentioned: the adoption of a definite national forest policy, the withdrawal of the public forests from further disposal to private individuals, their temporary patrol by the army against forest fires and depredations, the appointment of a commission to prepare a plan for the administration of public properties, the service of forests in watershed protection, the need of courses in forestry in the higher educational institutions. When in 1896 Congress had authorized the National Academy of Sciences to make an investigation and report on the inauguration of a national forest policy for the forested lands of the United States, the Academy appointed Sargent chairman of a committee on this question. The members of the committee visited the West to obtain first hand knowledge of the public forests. As a result of their report President Cleveland set aside new forest reservations in addition to the few already established under the Act of Congress of March 3, 1891, aggregating in all more than twenty million acres. This action met with strong opposition and protest in the West, and when President McKinley took office he was hard pressed to annul the actions of his predecessor who had signed the proclamation concerning the reservations just before the completion of his office. The committee of the National Academy urged the President to stand firm against this pressure and Sargent had a long interview with the President with the result that the latter decided to take no action in the matter and let the reservations stand. The President stated afterwards that he had intended to return the reservations to the

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public domain thus making them available for private exploitation before the conference with the committee and its chairman changed his mind. Sargent also strongly advocated the creation of national parks. Already in 1883 he recommended setting aside the glacier region in northern Montana as a national park, which was finally done nearly 30 years later by an act of Congress. In 1897 he recommended that funds be raised to save at least some remnants of the noble Redwood forests on the Pacific coast which also was done many years later.

Sargent's contributions to horticulture and to American horticulture in particular are various and many. Of the greatest importance is, without doubt, the introduction of a very large number of trees and shrubs into American gardens and into cultivation generally, chiefly from eastern Asia as a result of his own journeys and the expeditions sent out by the Arboretum. The number of trees and shrubs introduced to this country by the Arboretum is more than 1000 and those first introduced into cultivation number about 790 besides 570 new species of Crataegus. Among those introductions which have gained great popularity may be mentioned the Japanese Barberry, Berberis Thunbergii, which is now found in almost every garden, Kaempfer's Azalea, Rhododendron obtusum var. Kaempferi, the hardiest of the Indian Azaleas, and Clematis paniculata, one of the most striking autumn-flowering vines. Also the introduction of a hardy race of the Cedar of Lebanon merits mention. Sargent's translation into

English of the book on tree pruning by Des Cars and the practical application by him of the principles laid down in that work to the old Oaks in the Arboretum and their subsequent rejuvenation has done much to bring the advantages of correct and scientific tree pruning before the public. At Holm Lea, his beautiful estate of about 180 acres in Brookline, one of the finest estates in this part of the country, he set a splendid example to garden and plant lovers and influenced landscape gardening throughout New England and beyond. His garden was particularly famous for a large collection of fine plants of Indian Azaleas which made a wonderful display when in bloom. These and the Rhododendrons, the Lilacs, Wistarias and other plants attracted thousands when he threw his grounds open to the public on certain days in the spring. In collaboration with his friend H. H. Hunnewell he has made the cultivation of Rhododendrons popular in New England by showing that it is possible to grow them successfully even in this rather severe climate. As vice-president of the Massachusetts Horticultural Society and trustee for fifty-four years and president for twenty-eight years of the Massachusetts Society for the promotion of agriculture he exerted great influence on the progress of horticulture. Through the "Arnold Arboretum Bulletin of popular information" which he published from 1911 until his death, he made the treasures of the Arboretum known to a large circle of readers and induced them to try in their gardens the many beautiful trees and shrubs of recent introduction.

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Of Sargent's contributions to botany his monumental work "The Silva of North America" published in fourteen folio volumes with 740 plates easily takes first rank, but a wider circle of students of the North American forest flora was reached by his "Manual of the trees of North America" which in fact is a condensed "Silva" brought up to date: in its second edition published in 1922 there are 783 trees illustrated. One of the most important contributions to American botany is his work on American Hawthorns; between 1901 and 1923 he published numerous papers on Crataegus describing about 730 new species and revising the Crataegus flora of certain regions. He also was especially interested in American species of Tilia, Quercus, Aesculus and Carya and other trees; he wrote several papers dealing with these genera and described many new species. He also furthered greatly our knowledge of the flora of the Far East. He gave in his "Forest Flora of Japan" a comprehensive account of the forest flora of Japan, but it is with the flora of China that his name is most intimately connected; he sent collectors to different part of China to gather herbarium specimens and seeds. Among these collectors E. H. Wilson easily ranks first, and to record and describe the plants he brought back, Sargent published "Plantae Wilsonianae" a work of three volumes which is one of the most important contributions to the flora of China. The Journal of the Arnold Arboretum edited by him since 1919 also contains many papers concerning the flora of eastern Asia chiefly based on the herbarium of the Arboretum. For bringing together in that herbarium such a good representation of the flora of eastern Asia, the students of that rich flora are greatly indebted to him. The herbarium and the library of the Arnold Arboretum are monuments of his foresight which will be appreciated even more in the future than they are at present. Sargent also found time for public service in other fields. He was Park Commissioner of the Town of Brookline, Trustee of the Museum of Fine Arts of Boston and of the Brookline Library, he held offices in some corporations and was a member of several clubs. Many honors were bestowed upon Sargent during his long and active life. He was fellow of the American Academy of Arts and Sciences, member of the National Academy of Sciences, American Philosophical Society, St. Louis Academy of Sciences, Société botanique de France, Société nationale d'horticulture de France, foreign member of the Linnean Society of London, corresponding member of the Academy of National Sciences of Philadelphia, Botanical Society of Edinburgh, Société centrale forestière de Belgique, honorary member of the California Academy of Sciences, Royal Irish Academy of Dublin, Botanical Society of Tokyo, Société nationale d'agriculture de France, Deutsche dendrologische Gesellschaft, Forestry Society of Finland, Dendrological Society of Prague, Scottish Arboricultural Society, Société nationale d'acclimatation de France, English Rhododendron Society, Garden Club of America, Women's National Garden and Farm Association of America. In 1907 he received from Harvard

University the degree of LL.D. In 1910 the first award of the George Robert White medal, intended for the man who did most to advance the cause of horticulture during the year, was made to him by the trustees of the Massachusetts Horticultural Society. In 1920 the Garden Club of America presented its first medal of honorary award to him in recognition of his services to horticulture in general and to the gardens of America in particular. In 1923 he was given the Frank N. Meyer Horticultural medal by the American Genetic Association for "distinguished service in the field of foreign plant introduction." In the following year the Loder Rhododendron cup of the Royal Horticultural Society of England went to him, the first time that the cup had been sent out of Europe. Several books have been dedicated to him, as the 137th volume of the Botanical Magazine, E. H. Wilson's "The Romance of our trees," A. Rehder's "Manual of cultivated trees and shrubs" and the first volume (not yet published) of H. H. Hu's "Icones plantarum sinicarum." Many plants have been named in his honor: Sargentia S. Wats., a Mexican tree belonging to the Rutaceae with one species S. Greggii S. Wats.; Sargentodoxa Rehd. & Wils., constituting the family of Sargentodoxaceae, with one species S. cuneata Rehd. & Wils.; Sargentiella Koehne, a subsection of Prunus; and the following species and varieties: Aesculus glabra var. Sargentii Rehd., Berberis Sargentiana Schneid., Campylotropis Sargentiana Schindl., Clematis Simsii var. Sargentii Rehd., Crataegus Sargentii Beadle, Cupressus Sargentii Jeps., Erycibe Sargentii Merr., Eugenia Sargentii Merr., Evonymus Sargentii Loes. & Rehd., Ficus Sargentii Merr., Fraxinus Sargentiana Lingelsh., Hydrangea Sargentiana Rehd., Juniperus chinensis var. Sargentii Henry, Lonicera Sargentii Rehd., Magnolia Sargentiana Rehd. & Wils., Malus Sargentii Rehd., Omphalea Sargentii Merr., Philadelphus incanus var. Sargentianus Koehne, Picea Sargentiana Rehd. & Wils., Populus Sargentii Dode, Prunus Sargentii Rehd., Pseudophoenix Sargentii H. Wendl., Quercus Sargentii Rehd., Rhamnus Sargentianus Schneid., Rhododendron Sargentianum Rehd. & Wils., Sorbus Sargentiana Koehne, Sorbus Sargentii Dipp., Spiraea Sargentiana Rehd., Syringa Sargentiana Schneid. and Viburnum Sargentii Koehne. Also garden forms of Rhododendron, Syringa and Rosa, genera in which he had been much interested from a horticultural point of view have been named for him and members of his family.

Endowed with a strong personality he devoted a long life to his chosen work and well fulfilled the duties laid upon him. He has passed from us leaving a monument than which none could be more inspiring. The trees he planted will keep his memory green and his name will live as long as the Arnold Arboretum stands.

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